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GREEN PRACTICES IN THE HOSPITALITY INDUSTRY: CASE STUDY OF DEHRADUN AND MUSSOORIE

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Abstract

Tourism is one of the leading growth sectors of the global economy, bringing in billions of dollars annually in developing countries and transporting millions of people internationally. But tourism industry's growth through the years has created an increasing amount of stress on the environment .Uttrakhand is a holiday destination for tourist because of its historical , cultural and natural heritage .The regions climate and resources enables economic and social development that results for tourism on the other hand the number of tourist heading for the region representing threat to its natural resources as well as to the balance of its Eco system .In order to conserve local biodiversity while sustain the tourism industry a new approach involving sustainable development must be implemented to achieve this ,different component of the tourism industry need to be integrated in a global strategy of the environmental protection .Since hotel industry is at the heart of tourism activity , it is important to evaluate and assess its environmental impact , there is hence a need for greener hotels that are at the heart of Tourism Industry.

Key Words: *Tourism; Green Practices; Sustainability Environment Protection;*

Concept and Significance of Ecotel: Ecotel is a new concept in hospitality that claims to work for environment protection and preservation. All Eco-certified hotels must pass a detailed

inspection and satisfy stringent criteria designed by environmental experts. Indians are travelling a lot these days. Millions of Indians and foreign tourists visit Dehradun and Mussoorie every year. Due to this the locals cut down trees to construct hotels for tourists to stay, install more air conditioners for their comfort, and bring in autos, taxis and buses to cater to their transport needs. Cutting a forest down, or digging land up, to build a resort destroys the local ecosystem, affecting air, water, animals and vegetation. To build a hotel in the middle of a dessert or on a mountain the locals need to bring resources from outside, again changing the environment. Human interference even affects the environment worldwide. As per the estimate of Ministry of Environment and Forest (MoEF), Government of India, an average 150-room hotel consumes as much in one week as hundred person households do in one year. Green or Ecotel Hotels is a solution to reduce this impact of tourism in many ways. These are environmentally-friendly properties with programs to save water and energy and reduce solid waste. Additionally, the architecture of hotels with 'Green Certification' is aimed at saving energy. Green Hotels are eco-friendly, energy conserving, nontoxic and recyclable. Environmentally friendly hotels not only save money for the owner and guests, but also resources for the world.

Objectives: To evaluate the green practices in accommodation industry in study area Consumers' perception regarding green practices.

Review of Literature: Understanding the need of greater Environmental sustainability, Marriott Environmental Policy statement has outlined that they will reduce energy and water consumption 20% by 2020, water 20% per occupied room. They are the first major chain hotel to calculate carbon footprint and launch a plan to improve energy, efficiency and in 2011 was named the "Greenest" hotel company in UK. Bader (2005), in his study found that the solar panels can generate around 25% of the energy that a hotel needs to operate. As solar energy has become one way, hotels have been able to cut cost while using "Green Energy ". Yong Han Ahn and Annie R Pearce (2007), simply orienting a building to capture insulation can save on energy use. Green building has become an important component of the whole construction market for future changes in the industry in coming years. Hatem(2010), found that most hoteliers are more willing to enact small scale waste reuse practices rather than larger practices that would require changes on operational level.Hayward (1994), indicated that customers participation in the hotel's waste recycling programme would be received positively. Barclay, Buckley and Lundbo

(2006) indicated that staff commitment was essential for the success of hotel's waste minimization program. Horobin & Long (1996), operators of small tourism firms often lack the information, guidelines, time and motivation to implement environmental practices. Abu Taleb (2005), developed a model for larger hotels in Egypt to assist them recycling hotel waste. Markower (2009), "Products and services need to be more than merely greener- they need to be better". Walsman (2014), 93 LEED certified hotels found that certified hotels displayed better financial performance than a large sample of non certified ones.A study of over 2000, independent hotels in Spain by Segarra-Ona, Peiro-Signes and Verma, found that hotels that have implemented the ISO 14001 Environmental Standards displayed stronger sales ans earnings before taxes and depreciation than those that were not certified.

Functional Profiling of Green Hotels: Green Hotels are constructed using environment-friendly materials like PPC (Portland Pozzalana cement), which last long, are energy saving (almost 40 per cent) and insulate against extremities of weather. Their windows are thermally sealed and double-glazed preventing heat and noise from entering the room. These measures lower air-conditioning or room heating costs and save electricity. They use low energy lamps (compact fluorescent lamps) for all lighting. For most such hotels room lights and A/C are switched on only when we insert the key. The interactive TV in the rooms of some such hotels can be used to send/receive messages and clear bills, thereby saving paper/ phone costs. The hotels work with NGOs, corporate groups and educational institutions to conduct environmental community awareness programs. Green Hotels preserve and recycle water. All taps in the guest rooms, toilets, cafeteria and the kitchen contain special devices that increase force and decrease water outflow, saving nearly 50 per cent water. The toilets use concealed cisterns, which consume only seven litres of water as compared to the ordinary cistern that flushes out almost 20 Mini tanks (3.5 litres) are used for a quick flush. Recycled water is used for gardening and air-conditioning. Some Green Hotels capture rainwater into rain-harvesting wells which helps restore the water table. Bio-degradable kitchen, toilet and garden waste is decomposed in decompose pits and used as manure. Non-bio-degradable waste is segregated and sent to recycling centers.

Water, Energy and Waste Management in Accommodation Units of Study Area: In Dehradun and Mussoorie region the environment issue is coming up in recent years. The

problem of water, energy and waste management is now a big environment problem. In the research study the questions were asked to respondents to know their awareness about environment issue and the measures taken by the hotels to deal with these issues. The results are shown below in Table 3.1. The result indicates that the persons in the hotels in this area are aware about the environment problems but in order to deal with these problems they are taking only basic measures such as installing energy efficient lights, single point room lights, using dimers in restaurant avoiding using plastics and other dry wastes in the hotels etc. It is observed in the study that there is no strict execution of the legal instructions in the area about the measures to be taken by the hotels as guided by the administration. It is recommended that the government should make more strict norms to deal with various environment problems. Time to time the government officials also ensure that there should be proper execution of the regulations by the hotels in the area.

Table 3.1: Awareness level for Environment Issues in Dehradun and Mussoorie region

Environment Issues	Measures	Yes	No
Measures adopted for Energy conservation	Installed energy efficient lights?	90%	10%
	Has the hotel installed sub meters in different functional areas?	0%	100%
	Single point room lights, A/C key cards/ switches being used?	78%	22%
	Are you using any renewable energy source?	30%	70%
	Do you have sectional switches or dimmers in restaurants and other areas to switch off or dim lights in unused, low use area?	80%	20%
Water Management	Have you installed water meters in different areas?	10%	90%
	Do you have system of rain water harvesting?	30%	70%
	Do you have a policy of testing drinking water?	30%	70%
	Do you have a policy of testing water for other uses?	20%	80%
	Do you have effluent treatment plant?	20%	80%
Water Disposal and Waste Management	Are you separating plastic, metal, glass, and other solid waste?	80%	20%
	Are you recycling and disposing off such waste?	30%	70%
	Do you separate wet and dry waste in kitchens/restaurants?	60%	40%
	Is your wet garbage storage facility is air conditioned?	10%	90%

Source: Field Visit

It is observed in the research study that suitable measures are not taken by the hotels in Dehradun and Mussoorie region in order to control the environment related problems. Environment problems are to be considered very seriously by these hotels and there should be proper guidelines issued by the Government to control them.

4. Contribution to Nature Conservation and Community Development: Conservation is an ethic of resource use, allocation, and protection. Its primary focus is upon maintaining the health of the natural world. Secondary focus is on materials conservation and energy conservation, which are seen as important to protect the natural world. Community development is a structured intervention that gives communities greater control over the conditions that affect their lives. This does not solve all the problems faced by a local community, but it does build up confidence to tackle such problems as effectively as any local action can. Community development works at the level of local groups and organizations rather than with individuals or families. The range of local groups and organizations representing communities at local level constitutes the community sector. Community development is a skilled process and part of its approach is the belief that communities cannot be helped unless they themselves agree to this process. Community development has to look both ways: not only at how the community is working at the grass roots, but also at how responsive key institutions are to the needs of local communities.

In the research study it is found that most of the hotel units are not having the proper written environment policies i.e policy for energy conservation, water management, ISO 14000 certification. This is also found that the hotel units are also do not have any written policy for not using hazardous chemicals and cleaners, recycling papers etc. In the region it is observed that there is lack of awareness about standard eco practices among the peoples. There is a need of the proper training programs to educate the local peoples about standard eco practices. This will not only improve the eco system of the area, also improves the potential as a world class tourist destination. Pollution is the introduction of contaminants into a natural environment that causes instability, disorder, harm or discomfort to the ecosystem i.e. physical systems or living organisms. Pollution can take the form of chemical substances or energy, such as noise, heat or light. Pollutants, the components of pollution, can be either foreign substances/energies or naturally occurring contaminants. In Dehradun and Mussoorie region though the pollution problem is not much but air pollution increases at a faster rate. This is due to increase in number of vehicles, industries etc. In the study it is observed that at present there are no serious measures are adopted by the hotels to deal with pollution problem in the area. Table 4.1 exhibits the eco-friendly practices and environmental measures undertaken by the hotel properties.

Table 4.1: Eco-friendly Practices adopted by the hotels

Eco Practice	Opinion Matrix	Yes	NO
Environment Policy and Management	Does the hotel have an environment policy?	30%	70%
	Has the property got an environment audit done?	20%	80%
	Do hotel have status of ISO14000 certification?	10%	90%
	Do you have written policy for Energy conservation?	10%	90%
	Do you have written policy on Water Management?	15%	85%
Hazardous Chemical & Eco Purchasing & Recycling	Do you have a policy of not using hazardous chemicals and cleaners?	20%	80%
	Do you buy biodegradable products?	30%	70%
	Do you have the policy of recycling papers and envelopes?	10%	90%
	Have you shifted to bio pesticides and bio fertilizers as against chemical pesticides and fertilizers?	10%	90%
	Are you buying organic food?	20%	80%
Pollution Control	Do you have both fresh air and exhaust systems in kitchen, laundry, boiler room, plant room, and service areas?	70%	30%
	Do you have separate no smoking rooms and floors?	40%	60%
	Do you use ozonators for rooms?	20%	80%
	Do you inform your banquet clients about noise pollution levels and timings as applicable in your area?	90%	10%
	Is your banquet sales department aware of the noise pollution rules and standards?	100%	0%

Source: Field Visit

5. Consumer's Perception, Expectation, Attitude and Behaviors toward Green Practices

Perception is defined as the process by which an individual selects, organizes and interprets stimuli into a meaningful and coherent picture of the world. It can be described as "how we see the world around us". For marketers consumer's perceptions are much more important than their knowledge of objective reality. Consumer's perception effect their actions, their buying habits and their leisure habits etc. since consumers make decisions and take actions based on what they perceive to be reality, a study of consumer perception is very important to understand the levels of consumers' satisfaction. A study of consumer behavior and perception is necessary to understand the customer demand and customer satisfaction for any industry and the Hospitality industry is not an exception. Tracing the guest needs, wants and opinion about the quality of services will be useful to standardize the Hospitality services and increase the customer satisfaction. The perception can be viewed from following two points:

Services offered – as perceived by the service provider

Services received – as perceived by the customers: In the research study the customers were asked to analyze their perception about green practices adopted by the hotels. Study revealed that most of the customers are aware about the environment problems but they are less aware about the environment problems in hospitality industry. It is also found that in Dehradun and Mussoorie the local people are also aware about the environment problems but they do not know how to cope up with them. Environment management and conservation perspectives in present era forced various hotel properties and other stakeholders of hospitality industry to go green. A growing number of organizations are espousing their "green" or "eco" credentials. The concept of clean and green mechanism is purely substantiated by ecofriendly practices. With the mushrooming growth of various players in hospitality industry and its aftermath effects, ecofriendly and green practices adopted in hospitality industry is a need of the hour. Similarly, The Energy and Resource Institute (TERI) have undertaken various energy efficiency projects for hospitality sector in close cooperation with FHRAI. The Project has been divided into three phases with the deliverables underlined below in Table 5.1.

Table 5.1: Framework for Renewable Energy Technologies for Hospitality Sector Phase

Phase I	✓ Five Energy Fact Sheets ✓ Checklist ✓ Online Tools ✓ Manuals, best practice examples and case studies
Phase II	✓ Components for Project websites ✓ Inputs for Project Help lines
Phase III	✓ Establishing Benchmark Values ✓ Framework for inclusion of Renewable Energy Technologies (RETs) as a criterion in Star Rating of Hotels ✓ Regional Awareness Workshops ✓ National Conference on RETs.

Hotel properties like Jaypee Hotel (Mussoorie), Sarover Potrico (Mussoorie), Hotel Arif Castles (Nainital), Claridges Nabha (Mussoorie), Ananda Spa and Resorts (Narendra nagar), Kasar Jungle Resort (Almora), Kalmatiya Sangam (Almora), Hotel Great Ganga (Rishikesh), Suman Royal Resort (Kausani), Country Inn Suits (Haridwar), Naini Retreat (Nainital) in Uttarakhand follows eco-friendly practices as does other hotel properties in India. Integration of sustainability into business is an emerging phenomenon where people's expectations of business are drastically changing. Stakeholders are calling for robust policies, improved performance, openness and

transparency on sustainable development. Sustainable and green practices in Hospitality Industry are a new concept, which suggests that the tourism development should meet the needs of the present without damaging the clean and green environment. To this end, Department of Environment and Forest does have a greater concern for the following practices in Uttarakhand.

Botanical Gardens-cum Heritage Centres and Theme Parks will be established in order to highlight the rich floral and faunal biodiversity of Uttarakhand. Integrated Ecotourism projects will be developed and established and steps will be taken to promote eco-friendly tourism activities like Jungle Safaris, Nature Walks, Mountain treks, Camping etc. in a manner that also promotes awareness and sensitivity towards environment conservation. Tree plantation as a tourism linked activity will be given special attention. Action shall be taken in a planned manner to deal with the problem of non-bio-degradable wastes. Intensive campaigns to regulate plastic waste shall be launched with the assistance of the private sector and nongovernmental organizations. The use of earthquake resistant technology and techniques in construction of buildings, and use of local materials will be promoted and encouraged. Special attention shall be given to the aspect of carrying capacity while preparing tourism development plans. Action will be taken to develop projects for ropeways, amusement parks, golf courses, children's parks, lakes and ponds and generally augment entertainment facilities in places of tourism interest. As apparent from the consumer's perception it is observed that tourists are satisfied with the green practices observed by the hoteliers in Mussoorie. The supporting services may not be that much satisfactory but its effect on the perception is pretty less. Tourists having visited the place for rest and leisure what they need is a clean and green environment as well as high service standard delivered by service providers.

Conclusion And Suggestion: The conclusions and suggestions drawn on the basis of data analysis and interpretation are discussed as below: In Dehradun and Mussoorie region the environment issue is coming up in recent years. The problem of water, energy and waste management is now a big environment problem. In the research study it is found that the persons in the hotels in this area are aware about the environment problems but in order to deal with these problems they are taking only basic measures such as installing energy efficient lights, single point room lights, using dimers in restaurant avoiding using plastics and other dray wastes in the hotels etc. It is observed in the study that there is no strict execution of the legal

instructions in the area about the measures to be taken by the hotels as guided by the administration. It is observed in the research study that suitable measures are not taken by the hotels in Dehradun and Mussoorie region in order to control the environment related problems. Environment problems are to be considered very seriously by these hotels and there should be proper guidelines issued by the government to control them. It is recommended that the government should make more strict norms to deal with various environment problems. Time to time the government officials also ensure that there should be proper execution of the regulations by the hotels in the area. In the research study it is found that most of the hotel units in Dehradun and Mussoorie region are not having the proper written environment policies, policy for energy conservation, water management, and ISO14000 certification. This is also found that the hotel units are also do not have any written policy for not using hazardous chemicals and cleaners, recycling papers etc. In the region it is observed that there is lack of awareness about standard eco practices among the peoples. It is suggested that proper training programs should be conducted to educate the local peoples about standard eco practices. This will not only improve the eco system of the area, also improves the potential as a world class tourist potential. In Dehradun and Mussoorie region although the pollution problem is not much but slowly and slowly here the air pollution increases. This is due to increase in number of vehicles, industries etc. In the study it is observed that at present there are no serious measures are adopted by the hotels to deal with pollution problem in the area. In the research study the customers were asked to analyze their perception about green practices adopted by the hotels. It is found that most of the customers are aware about the environment problems but they are less aware about the environment problems in hospitality industry. It is also found that in Dehradun and Mussoorie the local people are also aware about the environment problems but they do not know how to cope up with them.

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